

REMARKS

Reconsideration of this application, in view of the foregoing amendments and the following remarks, is respectfully requested.

Claim Rejections under 35 USC § 103

Claims 1-2, 17 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 5,892,768 ("Jeng"). Applicants respectfully traverse these rejections.

In rejecting claim 1, the Examiner has cited element 44 of figure 1 as showing various elements recited in claim 1. Applicants respectfully point to the Examiner that one criteria to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a) is that the prior art references must teach or suggest all the claim limitations. See M.P.E.P §2142. As to claim 1, Jeng does not teach or suggest all the claim limitations.

Following is a comparison of what is recited in claim 1 and cited by the Examiner:

Element recited in claim 1	Element cited by the Examiner
1. A <u>first IC</u> including: a) One or more <u>receivers</u> b) First <u>MAC</u>	1. A <u>first Ethernet receiving path module</u> including a) one or more receivers (<u>42, 50</u>) b) a first <u>media access control (MAC) function</u> (<u>46</u>)
2. A <u>second IC</u> including: a) one or more <u>transmitters</u> b) a <u>second MAC</u> function	2. a <u>second Ethernet transmitting path module</u> including a) one or more <u>transmitters</u> (<u>42, 52</u>) and b) a <u>second MAC function</u> (<u>48</u>)

From the table above, it can be clearly seen that First, the Examiner has not cited any element equivalent to a first IC. The element cited by the Examiner is actually part of an IC 44

(see figure 2), which includes the Mac function 44. If the Examiner's citation of first IC is considered to be IC 44, then there is no citation for a second IC as recited in element 2 of claim 1. The Examiner has cited the same element 42 for both ICs recited in claim 1. Further, if the Examiner's citation of Ethernet receiving path is considered to be equivalent to the first IC, then there is only one PHY 42 that provides the interface to the MAC IC 44, which means Jeng does not teach each and every element recited in claim 1.

Furthermore, Applicants respectfully point to the Examiner that claim 1 recites a first IC including two distinct sub-elements: one or more receivers and first MAC. The Examiner has cited an Ethernet receiving path "module". There is no "path module" shown or described in Jeng and in fact, the Examiner has not cited any element number for these "path modules". Jeng only shows a PHY 42 element that provides signal interface on path 26. Elements shown by Jeng are as follows:

1. An Ethernet port 40 including sub-elements:
 - a. A PHY 42
 - b. A Dual MAC 44 including MACs 46, 48, and dual memories 50 and 52 implemented using MX9742 by Macronix (see col. 3, lines 65-67)
2. Ethernet to MII interface 54; and
3. HDSL interface 56.

As it can be observed from figure 2 and corresponding description provided by Jeng that Jeng does not disclose each and every element recited in claim 1. Accordingly, claim 1 is clearly and patentably distinguishable from Jeng.

Similarly, claim 2 recites two clearly distinct elements:

1. An analog-to-digital converter coupled to the first IC,
2. An Up converter coupled the second IC

In rejecting claim 2, the Examiner has cited PHY 28. PHY 28 is cited for elements recited in claim 1. Claim 2 recites distinct elements (A/D and Upconverter) that are coupled to elements recited in claim 1 (first and second ICs). It appears that the Examiner has cited PHY 28 for everything that is recited in claims 1 and 2. Applicants respectfully point to the Examiner to either cite distinct elements as recited in claims 1 and 2 or in alternative, allow these claims.

Claims 3-10 depend from claim 1 and are patentably distinguishable from the cited reference for at least the same reasons as claim 1.

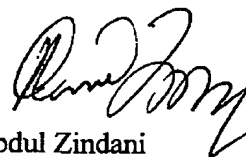
Claims 17 and 20 have been rejected in the manner of claim 1. Accordingly, claims 17 and 20 and those depend therefrom are patentably distinguishable from the cited reference for at least the same reasons as claim 1.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6,574,240 ("Tzeng") in view of US patent No. 6,567,195 ("Ford et al."). Applicants respectfully traverse these rejections.

Claim 11 has been amended in the manner of claim 1. Accordingly, claim 11 and those depend therefrom are patentably distinguishable from the combination of cited reference for at least the same reasons as claim 1.

Applicant believes this application and the claims herein to be in a condition for allowance. Please charge any additional fees, or credit overpayment to Deposit Account No. 20-0668. Should the Examiner have further inquiry concerning these matters, please contact the below named attorney for Applicant.

Respectfully submitted,



Abdul Zindani
Attorney for Applicant
Reg. No. 46,091

Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265
(972) 917-5137

TI-31019 - 9 -